AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A 5-thio- β -D-glucopyranoside compound of the following formula or a pharmaceutically acceptable salt thereof or a hydrate thereof:

$$R^{4AO}$$
 R^{3AO}
 R^{3AO}
 R^{3AO}
 R^{3AO}
 R^{3AO}
 R^{3AO}
 R^{3AO}

Fwherein

B represents a heteroaryl group which may be substituted with any substituent,

 R^{1A} , R^{2A} , R^{3A} and R^{4A} , which may be the same or different, each represent a hydrogen atom, a C_{2-10} acyl group, a C_{7-10} aralkyl group, a C_{2-6} alkoxycarbonyl group, a C_{1-6} alkoxy- C_{2-6} alkoxycarbonyl group,

Q^X represents N or C,

 X^A represents -(CH₂)n-, -CO(CH₂)n-, -C(OH)(CH₂)n-, -O-(CH₂)n-, -CONH(CH₂)n-, -NHCO(CH₂)n- (wherein n is an integer of 0 to 3), -COCH=CH-, -S- or -NH-, provided that when Q^X is N, X^A represents -(CH₂)n-, -CO(CH₂)n-, -C(OH)(CH₂)n-, -CONH(CH₂)n- (wherein n is an integer of 0 to 3) or -COCH=CH-, and

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R⁵, R⁶, R⁷, R⁸ and R⁹, which may be the same or different, each represent:

- a hydrogen atom;
- a halogen atom;
- a hydroxyl group;

a C_{1-6} alkyl group which may be substituted with one or more substituents selected from the group consisting of a halogen atom and a hydroxyl group;

a group represented by the formula:

-(CH₂)m'-Q'

{wherein m' represents an integer of 0 to 4, and Q' represents a formyl group, an amino group, a nitro group, a cyano group, a carboxyl group, a sulfonic acid group, an optionally halogen-substituted C₁₋₆ alkoxy group, a C₁₋₆ alkoxy-C₁₋₆ alkoxy group, a C₂₋₁₀ acyloxy group, a C₂₋₁₀ acyl group, a C₂₋₆ alkoxycarbonyl group, a C₁₋₆ alkylthio group, a C₁₋₆ alkylsulfinyl group, a C₁₋₆ alkylsulfonyl group, -NHC(=O)H, a C₂₋₁₀ acylamino group, a C₁₋₆ alkylsulfonylamino group, a C₁₋₆ alkylamino group, an N,N-di(C₁₋₆ alkyl)amino group, a carbamoyl group, an N-(C₁₋₆ alkyl)aminocarbonyl group, or an N,N-di(C₁₋₆ alkyl)aminocarbonyl group}; or

a C_{3-7} cycloalkyl group, a C_{3-7} cycloalkyloxy group, an aryl group, a C_{7-10} aralkyl group, an aryloxy group, a C_{7-10} aralkyloxy group, a C_{7-10} aralkylamino group, a heteroaryl group, or a 4- to 6-membered heterocycloalkyl group, provided that each of these groups may be substituted with 1 to 4 substituents selected from the group consisting of a halogen atom, a hydroxyl group, a C_{1-6} alkyl group and a C_{1-6} alkoxy group.

2. (currently amended): The compound according to claim 1, wherein X^A is $-(CH_2)n$ - or $-CO(CH_2)n$ - (wherein n is an integer of 0 to 3), or a pharmaceutically acceptable salt thereof or a hydrate thereof.

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3. (original): The compound according to claim 1, wherein X^A is -CH₂- or -CO-, or a pharmaceutically acceptable salt thereof or a hydrate thereof.

- 4. (original): The compound according to claim 1, wherein X^A is -CH₂-, or a pharmaceutically acceptable salt thereof or a hydrate thereof.
- 5. (currently amended): The compound according to any one of claims 1 to 4, wherein the moiety represented by the formula:

$$B_{Q^X}$$

is a group represented by the formula:

[wherein at least one of Q^A to Q^D represents a nitrogen atom, and the other each independently represent -C- Z^Y , provided that when Q^D is C, any one of the ring nitrogen atoms may be substituted with Z^X

(wherein Z^X represents an optionally halogen-substituted C_{1-6} alkyl group; an optionally halogen-substituted C_{3-7} cycloalkyl group; a C_{2-10} acyl group; a C_{2-6} alkoxycarbonyl group; a phenyl or C_{7-10} aralkyl group which may be substituted with one or more substituents selected from the group consisting of a halogen atom, a C_{1-6} alkyl group, a C_{1-6} alkoxy group, an amino group, a nitro group, a cyano group, a carboxyl group, a C_{2-10} acyl group, a C_{2-6} alkoxycarbonyl group, a C_{1-6} alkylthio group, a C_{1-6} alkylsulfinyl group, a C_{1-6} alkylsulfonyl group, a C_{2-10} acylamino group, a C_{1-6} alkylamino group, an N_7 -di(C_{1-6} alkyl)amino group; a pyridyl group; a lkyl)aminocarbonyl group; a pyridyl group; a

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thienyl group; a furanyl group; or pyrimidinyl group, and Z^Y independently represents a hydrogen atom; a halogen atom; a C_{1-6} alkyl group which may be substituted with one or more substituents selected from the group consisting of a halogen atom, a hydroxyl group and a C_{1-6} alkoxy group; an optionally halogen-substituted C_{3-7} cycloalkyl group; a carboxyl group; or a C_{2-6} alkoxycarbonyl group), or a pharmaceutically acceptable salt thereof or a hydrate thereof.

6. (currently amended): The compound according to any one of claims 1 to 4, wherein the moiety represented by the formula:

$$B_{Q^X}$$

is a pyrazole group represented by the formula:

$$Q^{A} Q^{B}$$

$$Q^{C}$$

[wherein when Q^A is N and Q^B is -N-Z¹ or when Q^A is -N-Z² and Q^B is N, Q^C represents - C-Z³, or alternatively, when Q^B is N and Q^C is -N-Z⁴ or when Q^B is -N-Z⁵ and Q^C is N, Q^A represents -C-Z⁶

(wherein Z^1 , Z^2 , Z^4 and Z^5 each independently represent a hydrogen atom; an optionally halogen-substituted C_{1-6} alkyl group; an optionally halogen-substituted C_{3-7} cycloalkyl group; a C_{2-10} acyl group; a C_{2-6} alkoxycarbonyl group; a phenyl or C_{7-10} aralkyl group which may be substituted with one or more substituents selected from the group consisting of a halogen atom, a C_{1-6} alkyl group, a C_{1-6} alkoxy group, an amino group, a nitro group, a cyano group, a carboxyl group, a C_{2-10} acyl group, a C_{2-6} alkoxycarbonyl group, a C_{1-6} alkylsulfinyl group, a C_{1-6} alkylsulfonyl group, a C_{2-10} acylamino group, a C_{1-6} alkylsulfonyl group, an N_1

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di(C_{1-6} alkyl)amino group, an N-(C_{1-6} alkyl)aminocarbonyl group and an N,N-di(C_{1-6} alkyl)aminocarbonyl group; a pyridyl group; a thienyl group; a furanyl group; or a pyrimidinyl group, and Z^3 and Z^6 each independently represent a hydrogen atom; a halogen atom; a C_{1-6} alkyl group which may be substituted with one or more substituents selected from the group consisting of a halogen atom, a hydroxyl group and a C_{1-6} alkoxy group; an optionally halogen-substituted C_{3-7} cycloalkyl group; a carboxyl group; or a C_{2-6} alkoxycarbonyl group), or a pharmaceutically acceptable salt thereof or a hydrate thereof.

7. (currently amended): The compound according to any one of claims 1 to 4, wherein the moiety represented by the formula:

$$B_{Q^X}$$

is a pyridyl group represented by the formula:

[wherein any one of Q^1 to Q^4 represents N and the other each independently represent -C- Z^7 (wherein Z^7 represents a hydrogen atom, a halogen atom, an optionally halogen-substituted C_{1-6} alkyl group, a C_{1-6} alkoxy group, an amino group, a C_{1-6} alkylamino group, an N,N-di(C_{1-6} alkyl) amino group, a C_{2-10} acylamino group, a C_{2-10} acylamino group or an optionally halogen-substituted C_{3-7} cycloalkyl group)], or a pharmaceutically acceptable salt thereof or a hydrate thereof.

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8. (currently amended): The compound according to any one of claims 1 to 4, wherein the moiety represented by the formula:



is a pyrimidyl group represented by the formula:

[wherein when Q^1 and Q^3 are each N, Q^2 and Q^4 each independently represent -C- Z^8 , or alternatively, when Q^2 and Q^4 are each N, Q^1 and Q^3 each independently represent -C- Z^9 (wherein Z^8 and Z^9 each independently represent a hydrogen atom, a halogen atom, an optionally halogen-substituted C_{1-6} alkyl group, a C_{1-6} alkoxy group, an amino group, a C_{1-6} alkylamino group, an N,N-di(C_{1-6} alkyl)amino group, a C_{2-10} acylamino group, a C_{2-10} acyl group or an optionally halogen-substituted C_{3-7} cycloalkyl group)], or a pharmaceutically acceptable salt thereof or a hydrate thereof.

9. (currently amended): The compound according to any one of claims 1 to 4, wherein the moiety represented by the formula:



is a pyridazinyl group represented by the formula:

[wherein Q^1 and Q^2 , Q^2 and Q^3 , or Q^3 and Q^4 each represent N, and the other each represent -C- Z^{10} (wherein Z^{10} independently represents a hydrogen atom, a halogen atom, an optionally halogen-substituted C_{1-6} alkyl group, a C_{1-6} alkoxy group, an amino group, a C_{1-6} alkylamino group, an N,N-di(C_{1-6} alkyl)amino group, a C_{2-10} acylamino group, a C_{2-10} acylamino group or an optionally halogen-substituted C_{3-7} cycloalkyl group)], or a pharmaceutically acceptable salt thereof or a hydrate thereof.

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10. (currently amended): The compound according to any one of claims 1 to 4, wherein the moiety represented by the formula:

$$B_{Q^X}$$

is a pyrazinyl group represented by the formula:

[wherein Q^1 and Q^4 each represent N and the other each represent -C- Z^{11} (wherein Z^{11} independently represents a hydrogen atom, a halogen atom, an optionally halogen-substituted C_{1-6} alkyl group, an amino group, a C_{1-6} alkoxy group, a C_{1-6} alkylamino group, an N,N-di(C_{1-6} alkyl) amino group, a C_{2-10} acylamino group, a C_{2-10} acylamino group or an optionally halogen-

substituted C₃₋₇ cycloalkyl group), or a pharmaceutically acceptable salt thereof or a hydrate thereof.

11. (currently amended): A 5-thio-β-D-glucopyranoside compound of the following formula or a pharmaceutically acceptable salt thereof:

(wherein Z^A represents a hydrogen atom, a C_{1-6} alkyl group, a halogen-substituted C_{1-6} alkyl group, a C_{3-6} cycloalkyl group, a benzyl group, a C_{2-10} acyl group or a C_{2-6} alkoxycarbonyl group, Z^B represents a C_{1-6} alkyl group or a halogen-substituted C_{1-6} alkyl group, R^{5B} to R^{9B} , which may be the same or different, each represent a hydrogen atom, a halogen atom, a C_{1-6} alkyl group, a halogen-substituted C_{1-6} alkyl group, a C_{3-6} cycloalkyl group, a C_{1-6} alkoxy group, a halogen-substituted C_{1-6} alkoxy group or a C_{1-6} alkylthio group, and R^{4B} represents a hydrogen atom, a C_{2-10} acyl group or a C_{2-6} alkoxycarbonyl group).

- 12. (currently amended): A pharmaceutical preparation, which comprises the 5-thio-β-D-glucopyranoside compound according to any one of claims 1 to 11claim 1 or a pharmaceutically acceptable salt thereof or a hydrate thereof as an active ingredient.
- 13. (original): The pharmaceutical preparation according to claim 12, which is an inhibitor of sodium-dependent glucose transporter 2 activity.
- 14. (original): The pharmaceutical preparation according to claim 13, which is a prophylactic or therapeutic agent for diabetes, diabetes-related diseases or diabetic complications.

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15. (currently amended): A pharmaceutical preparation, which comprises the 5-thio- β -D-glucopyranoside compound according to any one of claims 1 to 11-claim 1 or a pharmaceutically acceptable salt thereof or a hydrate thereof, in combination with at least one drug selected from the group consisting of an insulin sensitizer selected from the group consisting of a PPAR α agonist; a PPAR α / γ agonist; a PPAR α / γ agonist; and a PPAR α / γ / δ agonist, a glycosidase inhibitor, a biguanide, an insulin secretagogue, an insulin formulation and a dipeptidyl peptidase IV inhibitor.

16. (currently amended): A pharmaceutical preparation, which comprises the 5-thio-β-D-glucopyranoside compound according to any one of claims 1 to 11 claim 1 or a pharmaceutically acceptable salt thereof or a hydrate thereof, in combination with at least one drug selected from the group consisting of a hydroxymethylglutaryl coenzyme A reductase inhibitor, a fibrate, a squalene synthase inhibitor, an acyl-coenzyme A:cholesterol acyltransferase inhibitor, a low-density lipoprotein receptor promoter, a microsomal triglyceride transfer protein inhibitor and an anorectic.